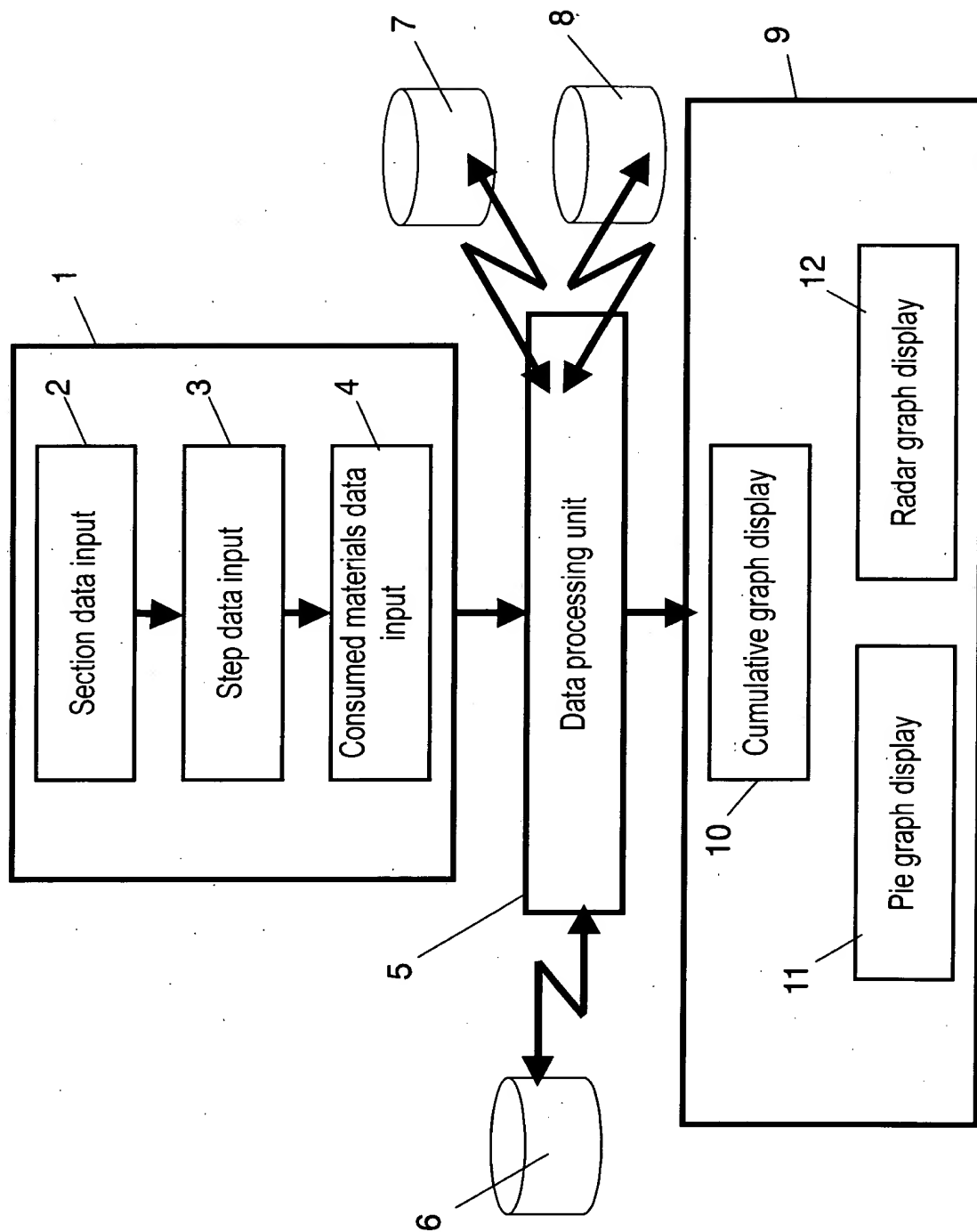


FIG. 1



[illegible]

## Section Name

## Purchased electric power data

14

Elec. purchased 0 kWh/yr

Elec. yield efficiency 34.9% 15

## Private power generation data

Gas Co.			
Gas	0	kWh/yr	0
Heavy oil	0	kWh/yr	0
Light oil	0	kWh/yr	0
Coal	0	kWh/yr	0

81

## Data on electricity

Energy consumed	MJ/yr (Energy consumed)
Energy consumed	MJ/yr (Energy input)
Global Warming Potential	Toxicity to human potential
GWP20	Acidification potential
GWP100	Neutrophication potential
GWP500	

Energy consumed

Global Warming Potential

MJ/yr (Energy consumed)  
MJ/yr (Energy input)

Toxicity to human potential  
Acidification potential  
Neutrophication potential

FIG. 3

Step data

19

23

Step classification code

Step No.

20

21

Sup No

0

22

Step code

Step name

Yield

Processing temperature °C

Step category

Processing time min

Products per one hour unit

Direct or Indirect

☒ Direct energy(for production equipment )  
☐ Indirect energy(for light, air conditioning )

Section select

▼

25

Electric power data

Rated power

0

kW

Duty factor

1

Ratio to full power

1

26

27

28

Cogeneration use

☒ No
 ☐ Yes

29

Non-electric power data

Natural gas

0

m<sup>3</sup>/yr

Coal

0

kg/yr

Light oil

0

kg/yr

Wood

0

kg/yr

Heavy oil

0

kg/yr

Gasoline

0

kg/yr

Note

FIG. 4

**Consumption material data**

Step code  31

Material used  33

Consumption  kg/  35

Place  34

☒ Direct material (To remain in final product)

☐ Indirect material (Not to remain in final product)

☐ Material for process (Needed to keep process)

CO2 emission	1928 g/kg	CO emission	0.1114 g/1kg
NOX emission	6.214 g/kg	N2O emission	0.1831 g/1kg
SOX emission	2.182 g/kg	CxHy emission	0.1182 g/1kg
CH4 emission	g/kg	HF emission	1.94E-0.5 g/1kg
HCL emission	g/kg	Dust emission	0.3327 g/1kg
GWP20	g/kg	GWP100	
AP	g/kg	NP	

36

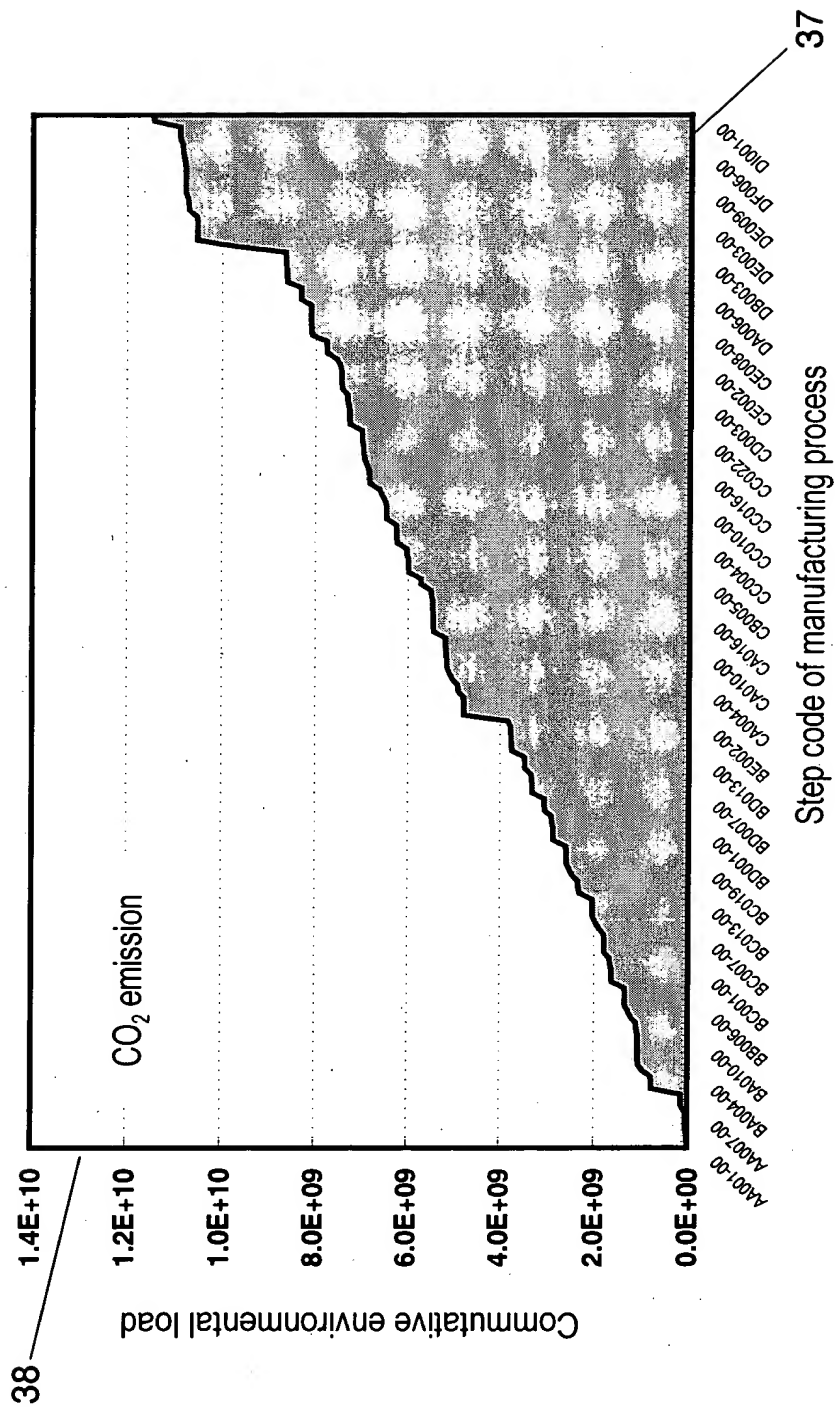
30

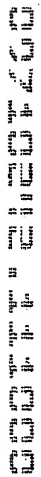
AA001-00	L - Carrier loader	▲
AA002-00	Inspection	
AA003-00	L1-Casset L/D	
AA004-00	2-Dry cleaning	
AA005-00	3-1 Laser Marker	
AA006-00	U1-Casset I/L	
AA007-00	L2-Casset L/D	▼

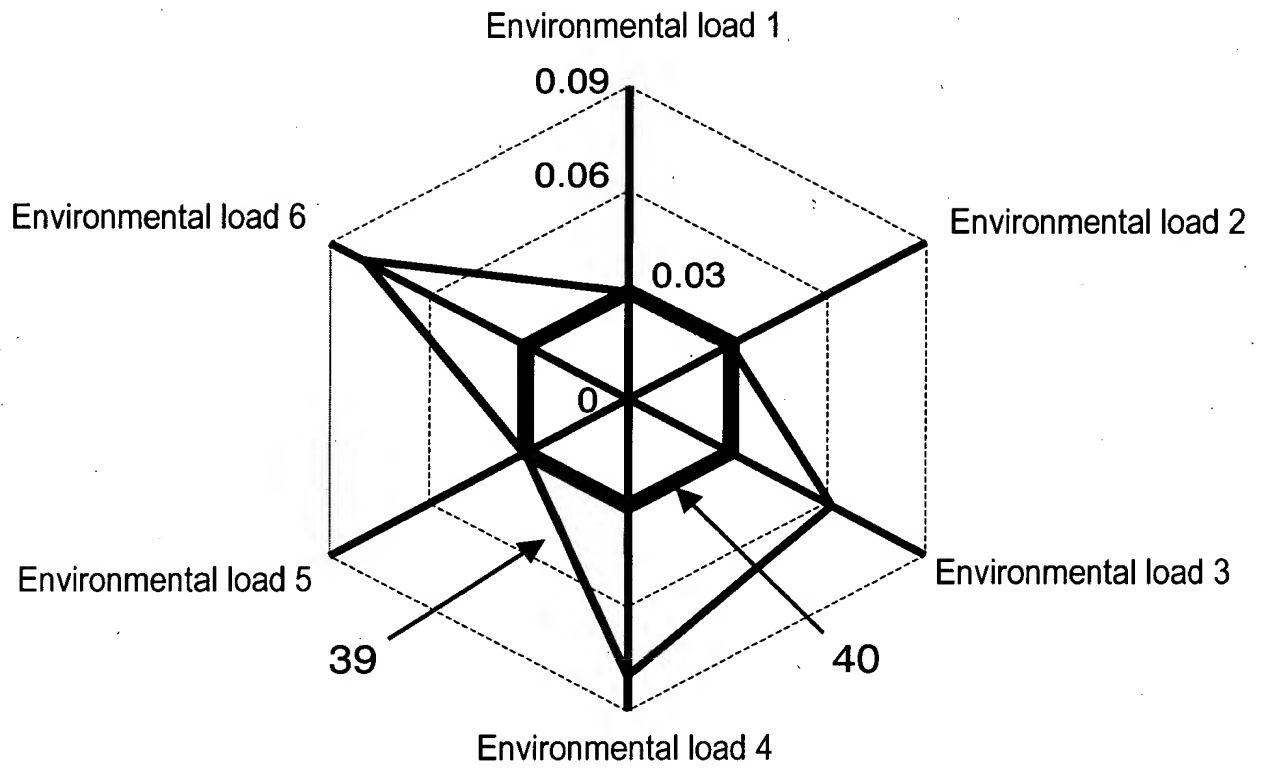
32

Polymer	Metal	Ceramics	Natural	Chemical	
ABS					▲
AN					
AS					
B/PET					
EP					
EPS					
Epoxy					▼

FIG. 5





[illegible]

# FIG. 8

## 1) Emissions by electricity (per 1kWh)

Electric power Co.	Emissions		
	CO <sub>2</sub> (g/kWh)	SOx (g/kWh)	NOx (g/kWh)
A Co.	490	0.98	0.84
B Co.	570	0.60	0.63
C Co.	380	0.53	0.45
D Co.	480	0.50	0.38
E Co.	470	0.43	0.42
F Co.	330	0.31	0.32
G Co.	770	0.54	0.55
H Co.	370	0.83	0.46
I Co.	500	0.34	0.51
J Co.	1000	2.00	1.40

## 2) Emissions by natural gas (per 1Nm<sup>3</sup>)

	(g/Nm <sup>3</sup> )	(g/Nm <sup>3</sup> )	(g/Nm <sup>3</sup> )
	2290	1.29	2.34



FIG. 9

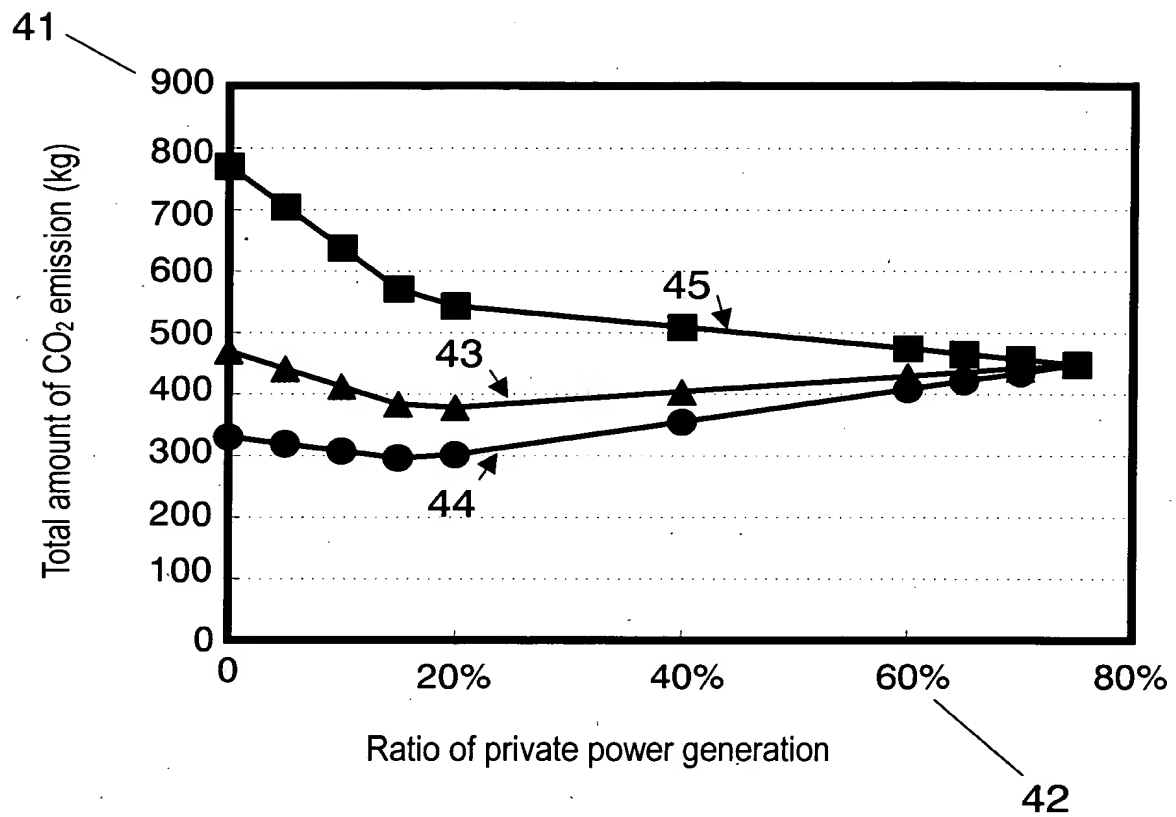


FIG. 10

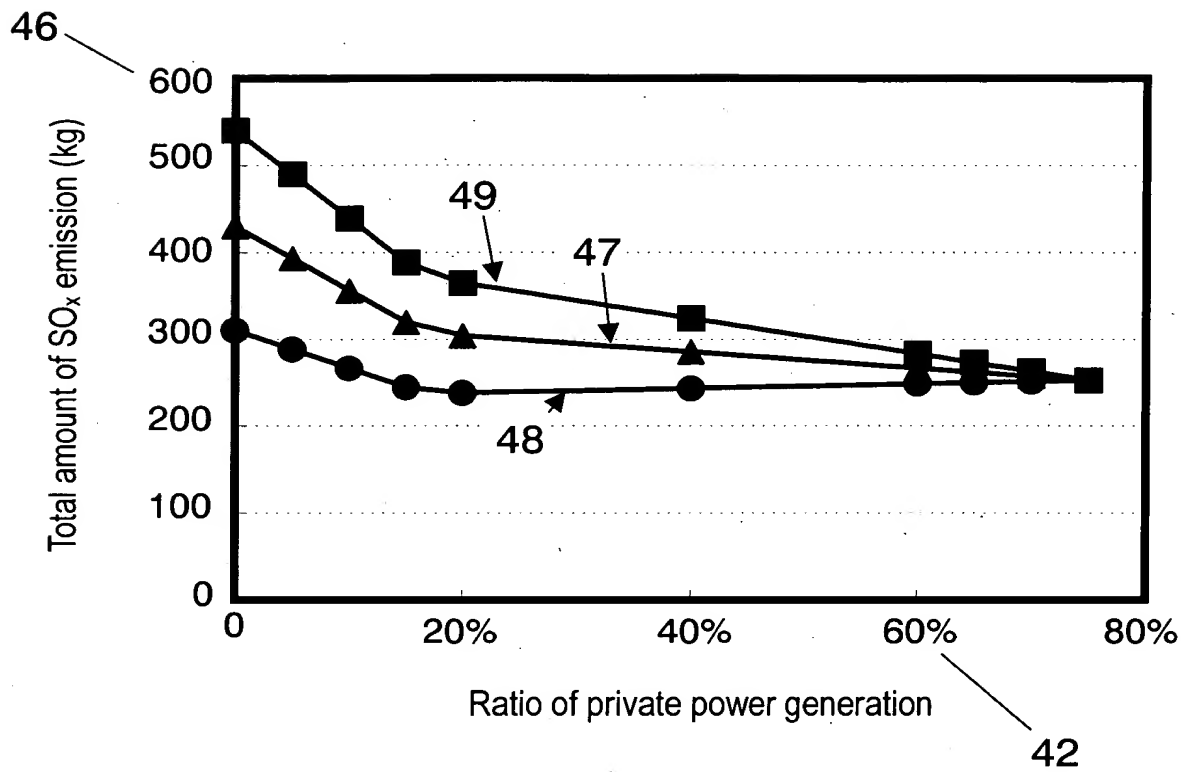


FIG. 11

